

**Photometry and Radiometry, Japan, NMIJ (National Metrology Institute of Japan)**

Note: Approval dates are shown only for the CMCs published after 24 May 2004

Calibration or Measurement Service			Measurand Level or Range			Measurement Conditions/Independent Variable		Expanded Uncertainty					Comments
Quantity	Instrument or Artifact	Instrument Type or Method	Minimum value	Maximum value	Units	Parameter	Specifications	Value	Units	Coverage factor	Level of Confidence	Is the expanded uncertainty a relative one?	
Luminous intensity	Tungsten lamp	Network of lamps, photometer and photometric bench	10	3000	cd	Correlated colour temperature	2000 K to 3100 K	0.64	%	2	95%	Yes	
Luminous flux	Tungsten lamp	Goniophotometer and integrating sphere	5	9000	lm	Correlated colour temperature	2300 K to 2800 K	0.84	%	2	95%	Yes	
Illuminance	Tungsten lamp	Network of lamps, photometer and photometric bench	1	3000	lx	Correlated colour temperature	2856 K	0.7	%	2	95%	Yes	
Irradiance, spectral	Tungsten lamp	Monochromator	3E-05	4E-02	(W/m <sup>2</sup> )/nm	Wavelength range	250 nm to 450 nm (includes 450 nm)	4.8	%	2	95%	Yes	
						Bandwidth	5 nm						
Irradiance, spectral	Tungsten lamp	Monochromator	6E-03	0.13	(W/m <sup>2</sup> )/nm	Wavelength range	450 nm to 600 nm (excludes 450 nm)	2.8	%	2	95%	Yes	
						Bandwidth	5 nm						
Irradiance, spectral	Tungsten lamp	Monochromator	2E-02	0.2	(W/m <sup>2</sup> )/nm	Wavelength range	600 nm to 830 nm	3.6	%	2	95%	Yes	
						Bandwidth	5 nm						
Irradiance, spectral	Tungsten lamp	Monochromator	5E-03	0.2	(W/m <sup>2</sup> )/nm	Wavelength range	830 nm to 2500 nm	6.0	%	2	95%	Yes	
						Bandwidth	10 nm						
Power, spectral total radiant	Laser	Iso-thermally controlled calorimeter	1E-05	0.01	W	Wavelength	632.8 nm	0.3 to 1	%	2	95%	Yes	Approved on 27 September 2004
						Type of laser	HeNe						